

REMARKS

Claims 20, 22 and 26-29 have been amended. Minor corrections have been made to the specification. Reexamination and reconsideration are respectfully requested.

Regarding the objection to the Abstract of the Disclosure, Applicant submits a new Abstract herewith deleting the term “said”.

Regarding the objections to the disclosure, Applicant notes the following. Concerning a cross-reference to the foreign priority document, Applicant respectfully submits this is not required as the application is the national stage entry of a PCT international application. Section 202.01 of the MPEP refers to continuations under 35 U.S.C. §120, which is not applicable here for this national stage entry.

As for paragraph [0005] in the substitute specification, this paragraph arose from the annexes to the international preliminary examination report under PCT Article 36. Hence, these annexes are considered part of the specification and the inclusion of paragraph [0005] in the substitute specification is submitted to be proper.

Regarding the objections to particular phrases, Applicant has amended paragraphs [0020] - [0022] to use a more appropriate English-language translation for the German term that literally translated to “extinctions”. Also, Applicant has amended paragraph [0022] to describe the light detection and ranging system known by the acronym LIDAR. Finally, regarding the phrase “differential contrast evaluation”, Applicant submits this phrase is proper and understood by those skilled in the art. For example, the EP reference described

in Applicant's background section in paragraph 5 describes the use of differential contrast evaluation.

Finally, Applicant has added a new paragraph [0023] that incorporates the language from the originally filed claim 9. No new matter has been added since this language was part of the originally filed application.

Regarding the drawing objection, Applicant has amended the Figure to schematically illustrate a memory 22 and visual range determining device 24. Support for these features is found in paragraph [0012] and newly added paragraph [0023].

Regarding the claim objections, Applicant has corrected the dependencies of claims 26-29. Hence, it should now be clear that the CCD camera is, for example, camera 14 shown in the Figure.

Applicant gratefully acknowledges the indicated allowability of claims 16-17, 9, 21-23, 28 and 29. However, because Applicant submits the underlying independent claims 10 and 24 are patentable over the prior art, these claims have not been rewritten into independent form at this time.

In the Office Action, independent claims 10 and 24, as well as dependent claims 11-15, 18, 20, 25-27 and 30 were rejected as obvious over JP 10-255019 in view of EVANS, JR. et al. (US 5,051,906) and the Canon Internet Website. In view of the following remarks, Applicant respectfully traverses this rejection.

Applicant's independent claim 10 recites a motor vehicle sensor system including at least two camera systems (such as cameras 14 and 16 for example) operable to image the outer environment. Each camera system operates in a different spectral region and is adjusted to a different focal distance. For

example, an infrared camera 16 takes over the environmental detection in a remote range since it is suitable for day and night use and operates free from blinding effects. In a close range, a CCD camera can be used for example. As a result, using camera systems with different focal distances operating in different spectral regions, the driving environment, as a whole, can be detected better in both close and remote ranges (see paragraphs 9-11).

By contrast, JP '019 merely describes a system having a CCD camera generating a visible image from the area in front of the vehicle and an infrared camera generating an infrared image. JP '019 determines a threshold based on temperature information of parts corresponding to high luminous parts, such as tail lamps, etc. These high luminous parts are those of the visible image in the infrared image. With this threshold, JP '019 claims improved vehicle recognition.

As acknowledged in the Office Action, JP '019 fails to teach or suggest having each of its camera systems adjusted to a different focal distance. In fact, because JP '019 decides upon a threshold for parts in the infrared image corresponding to those in the visible image, the skilled artisan would assume the cameras are adjusted to substantially the same focal distance.

In view of this deficiency in JP '019, the secondary reference to EVANS, JR., is cited for teaching the use of a CCD camera having a defined focal distance. Also, the Examiner cites to the Canon Internet Website to calculate a particular focal distance for an exemplary infrared camera of JP '019.

Regardless of the merits or accuracy of these calculations, these disparate references provide no teaching or suggestion for combining two camera systems

operating in different spectral regions that are adjusted to different focal distances as part of a sensor system. Rather, as mentioned above, JP '019 suggests to the skilled artisan that both cameras be adjusted to substantially the same focal distance. Hence, assuming the Examiner's calculations are proper, then JP '019 would motivate the skilled artisan to utilize a CCD camera having the same focal distance, not the focal distance taught by the EVANS reference.

The mere fact that cameras can have different focal distances does not obviate Applicant's claimed invention of a sensor system utilizing two camera systems that are adjusted to different focal distances and that operate in different spectral regions. Hence, Applicant submits independent claim 10 is patentable over the prior art. Similarly, independent claim 24 further defines these camera systems as being arranged in a forward portion of the vehicle body for imaging areas in a traveling direction. The differing focal distances of each of the two camera systems are also defined to be in the traveling direction. As discussed above, these limitations even further distinguish the present invention from the combination of references used in the Office Action.

In view of the foregoing, Applicant submits independent claims 10 and 24 are patentable. Further, claims 11-23 and 25-31 depend from these claims and are also submitted to be patentable.

Summarizing, Applicant has made an important contribution to the art to which the present subject matter pertains, for which no counterpart is shown in any of the art or combination of same. The invention is fully set forth and carefully delimited in all claims in this case. Under the patent statute, Applicant should not be deprived of the protection to which he is entitled for this

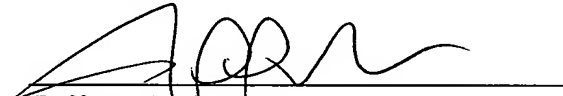
contribution. Accordingly, it is respectfully requested that favorable reconsideration and an early notice of allowance be provided for all remaining claims.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #951/50488).

Respectfully submitted,

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